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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,253	09/09/2003	Akihisa Nakajima	KON-1822	4123
20311	7590	03/24/2006	EXAMINER	
LUCAS & MERCANTI, LLP 475 PARK AVENUE SOUTH 15TH FLOOR NEW YORK, NY 10016			CHEA, THORL	
			ART UNIT	PAPER NUMBER
			1752	

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/658,253

Applicant(s)

NAKAJIMA ET AL.

Examiner

Thorl Chea

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) 1-4, 6-8 and 10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-8, 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1-4, 6-8, 10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification fail to discloses the copolymer is produced by pearl polymerization. The specification discloses the polymer containing at least 20 mole % of monomer represented by formula (1) and this polymer is polymerized by pearl polymerization. See for instance the polymer bead on page 23, second paragraph and page 7, third paragraph. The specification discloses the use of monomer (i) and (ii) to form a polymer using a pearl polymerization, rather than the copolymer having component (i) and (ii). The specification as originally filed fails to discloses the limitation "the polymer layer is provided as a back coating layer on the side of the support opposite the photosensitive layer and the polymer layer comprising the copolymer of (i) and (ii).

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-4, 6-8, 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

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applicant regards as the invention. The use of the term “polymer layer” appears to be not consistent with the specification disclosure. The specification on page 8 discloses the term “polymer containing layer is provides as a backed coating layer”. It is understood from the specification that the polymer containing layer contains a binder and polymer beads containing the monomer of (i) and (ii). However, the invention as claimed fails to reflect the scope of the polymer containing (i) and (ii), but copolymer (i) and (ii). Therefore, there is an inconsistency between the term “polymer layer” and “copolymer” presented in the claims and in the specification. The specification discloses the term “polymer layer” since that layer contains the polymer forming by (i) and (ii). Claim 4 is unclear with the respect to the structural relationship between the polymer layer and the support.

5. Claim 4 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The term “outermost layer on the support” fails to further limit the “back coating layer” in claim 1.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 1-4, 6-8 are rejected under 35 U.S.C. 103(a) as obvious over the combination of Sampei (US Patent No. 6,190,854) and Heitz et al (US 3,681,269).

Sampei discloses a material having a thermally developable material having having fluorine surfactant which is a (meth)acrylate polymer which has fluorinate alkyl group on its side chains, and which has a number a layer average molecule weight of not more than 30,000 in terms of standard polystyrene conversion and more preferably from 2,000 to 10,000; the fluorine containing surfactant is incorporate in any of image forming layer, component layer, or the secondary component layer, but preferably a layer provide on the image forming layer side, or in an outermost layer provided opposite of said image forming layer, for example protective layer. See column 5, lines 47-67, column 6, formula (A-a), (A-b), A-1 to A-7; columns 7-13, formulae A-8 to A-65; (meth) acrylate structural unit of the (meth)acrylate polymer having the alkyl group of formulate in columns 15-16, C-1 to C-19; columns 17-18, C-20 to D1-17; Table 1 in column 19, and Example in columns 39-40, Table 2. such as sample 106. The (meth)acrylate structural unit of the (meth)acrylate polymer is considered as hydrophobic group within the meaning of monomer claimed in the present claimed invention. and Heitz et al (US 3,681,269) in column 3. lines 70-75 to column 4, lines 1-20, discloses a polymerization process that can carried out by emulsion or by precipitation or pearl polymerization. The pearl polymerization is preferred because of the particle size of the swellable polymer can be controlled from the start, therefore avoiding losses which arise by comminution and sieving. The use of acrylates or methacrylates as starting material is shown in column 2, lines 50-73. Sampei discloses the polymer containing a copolymer and copolymer having molecular weight of not more than 3000, but fails to mention the process for forming thereof such as pearl polymerization process, but the

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pearl polymerization has been known in Heitz et al as preferred process because of the particle size of the swellable polymer can be controlled. It would have been obvious to the worker of ordinary skill in the art to form a fluorinated polymer taught in Simpei with a known pearl polymerization process and incorporate in the outermost layer provided opposite of said image forming layer with an expectation of achieving a material with excellent stability over passage of time as well as stable developability, and thereby provide a material as claimed.

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sampei (US Patent No. 6,190,854) as applied to claims 1-4, 6-8 above, and further in view of Artimoto et al (US Patent No. 6,475,697). The tin oxide has been known to be used in the electrically conductive layer for photothermographic material and taught in Arimoto et al in column 18, lines 9-22. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the tin oxide taught in Arimoto et al to improve the antistatic property of the material taught in Yonkoshi et al, and thereby provide a material as claimed.

#### ***Response to Arguments***

9. Applicant's arguments filed December 27, 2005 have been fully considered but they are not persuasive for the reason set forth the rejection above. It is still the Examiner's position that the invention as claimed is either anticipated by or found obvious over the combination of Sampei (US Patent No. 6,190,854) and Heitz et al (US 3,681,269) and the Declaration under 37 CFR 1.132 submitted on December 27, 2005 fails to overcome the prima facie case of obviousness rejection set forth above. The results presented in the Declaration can be achieved only by the use of the polymer beads in combination with a preferred binder such as "cellulose acetate propionate" which is a preferred cellulose esters that exhibiting a relatively softening

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temperature. See page specification disclosure on page 36, first paragraph where cellulose esters are preferred. The Declaration is therefore is not commensurate with the scope of the claimed invention. The scope of the polymer layer presented in the claimed encompasses the scope of any binder taught in Sampei including those taught in column 27, lines 1-20.

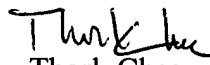
***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571) 272-1328. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tchea tln  
March 18, 2006

  
Thorl Chea  
Primary Examiner  
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